

**Olson Engineering, Inc.**

# Memo

**To:** Joe Turner, AICP, City of Camas Land Use Hearing Examiner

**CC:** City of Camas Staff

**From:** Peter Tuck, PE, Olson Engineering, Inc.



**Date:** August 16, 2022

**Re:** Hood Street Subdivision SUB22-01 Project Alternatives

**Attachments:** Current Preliminary Utility Plan C1.0, Original Preliminary Utility Plan C1.0

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A range of project alternatives were considered when developing the Hood Street subdivision with the intent to avoid or minimize onsite wetland and buffer impacts. Specifically alternate designs were implemented that addressed subdivision layout, road design and stormwater design with the intent to avoid or minimize onsite wetland and buffer impacts as detailed below. All onsite wetlands have been categorized as Category IV wetlands per Olson Environmental, LLC. This memo is provided to demonstrate that the sequencing required in CMC 16.53.050.D(1) was implemented for this project.

CMC 16.53.050.D(1)(a)(ii) provides an exception to the "avoidance" criterion if the project will become inconsistent with the City of Camas Comprehensive Plan or if the project will not be feasible to construct. The Camas Comprehensive Plan indicates that the goals and policies of the plan are implemented through development regulations in the zoning code, existing plans and Camas' standards including the Camas Design Standards. Therefore, where the project would be inconsistent with the Camas Municipal Code and the Camas Design Standards it would also be inconsistent with the Camas Comprehensive Plan. The second step in the sequencing is to minimize impacts to wetlands if complete avoidance is infeasible.

## Subdivision Layout

Specific subdivision site layout changes to avoid and/or reduce impacts are summarized here:

- Several pre-application conferences have been held with Camas Staff prior to the preliminary subdivision application to arrive at the current layout.
- The current layout includes an open space tract, (Tract "B") which preserves the majority of wetland "A." The Applicant reduced the size of the proposed lots in the project with density transfer provisions to preserve the majority of the wetland.
- The wetland/open space tract (Tract "B") was later increased in size from prior site layouts which minimized overall impacts to the wetlands.
- Lot 9 was reduced in width from 88 feet wide and 10,775 SF in size in the layout submitted in the last pre-application conference to 74.50 feet wide and 9,000 SF in size in the latest layout.
- Lot 18 with the existing home was reduced in size to approximately 1.01 acres throughout the process to provide additional land to design proposed lots that met the density transfer standards.

Avoiding Wetland "C" entirely would require a lot reduction of two lots. Avoiding all impacts to Wetland "A" is not possible because the main access road impacts Wetland "A," so the project could not occur without some impacts to Wetland "A." The access to the lots fronting NW 16<sup>th</sup> Avenue also impacts Wetland "A," so eliminating these impacts would require a lot reduction of three lots. There are only 18 lots proposed in the subdivision, so a 5 lot reduction would be a 28% lot reduction. The property is zoned R-7.5, and the planned density per the zoning code (CMC 18.09.040, Table 1) for R-7.5 zoned land is 5.8 units per net acre.

Additionally, the City's Housing Action Plan establishes an overall need for more housing in the City. Page 104 and 109 of the Housing Action Plan and policy 2.3.1 of the Comp Plan specifically establish a goal of 6 units per acre as an average minimum density for new development. Currently, our proposal is for about half that at about 3 units per acre, which is substantially less than the planned density for R-7.5 zoned land and about half of the City's Comprehensive Plan goal for new development.

The subdivision was designed to meet the development code requirements (which implement the Comprehensive Plan) while striving to meet the City's planned density goals for R-7.5 zoned land and avoiding and minimizing any unnecessary impacts to wetlands. A 5 lot reduction in the number of lots (28% fewer lots) would not be financially feasible to develop given the infrastructure costs involved.

Further, a 5 lot reduction in the number of lots (28% fewer lots) would not meet the City's planned density goal. Based on the memo from Olson Environmental, unmapped wetlands are common and prevalent throughout the City's buildable land supply. Assuming a 28% lot reduction across the board for properties with unmapped wetlands (which seems a reasonable assumption based on our experience developing subdivisions in Camas), an interpretation that the "avoidance" criterion requires a lot reduction would jeopardize the City's ability to meet the planned density goal of an average of 6 units per acre for new development in the City, rendering the project inconsistent with the Comprehensive Plan.

### **Road Design**

- An internal road is needed to provide access to the proposed lots and circulation throughout the site. Wetland "B" is located within the proposed road layout. It is also our understanding Wetland "B" has been determined to be isolated according to Olson Environmental, LLC and therefore exempt from the wetland code.
- Changes made throughout the design process include changing the primary internal road NW 17<sup>th</sup> Avenue from a proposed public road (52 feet of right of way) to a private road (48-foot-wide private road tract) which minimized impacts to the adjacent Wetland "A."
- NW 17<sup>th</sup> Avenue was located central to NW 16<sup>th</sup> Avenue and NW 18<sup>th</sup> Avenue on Hood Street per road spacing requirements. To enable the northwest corner of the site to be served, an S curve was designed into the NW 17<sup>th</sup> Avenue alignment. The S curve was located to maximize safety and minimize wetland impacts. The current alignment has a slight impact to Wetland "A". However, it should be noted that the impact to the wetland is only slightly reduced by moving the S-curve east while the safety issues increase significantly. The safety concern with moving the S-curve is that vehicles would encounter a curve immediately after entering or come out of a curve as they approached the intersection with Hood St.
- According to the Pre-application Conference Report, NW 16<sup>th</sup> Avenue to the south of the project is classified as a 3 Lane Collector/Arterial. According to the Camas Design Standards the minimum access spacing for an arterial is 660 feet and no new driveways are permitted. Since the portion of the site that fronts on NW 16<sup>th</sup> Avenue is only approximately 250 feet from NW Hood St. to the east property line, 50 feet from NW Ilwaco Ct. to the west property line, 160 feet from NW Juneau Ct. to the west property line, and 360 feet from NW Klickitat St. to the west property line, this spacing cannot be met for a new street intersection for the Hood Street

Subdivision off NW 16<sup>th</sup> Avenue. Therefore, an internal access to any lots fronting NW 16<sup>th</sup> Avenue is required. The private road tract to serve Lots 12, 13 and 14 was designed to the minimum width allowable to minimize impacts to Wetland "A".

### **Stormwater Design**

Historically the central portion of the site discharges to Wetland "A". In the original design, runoff from this portion of the site was collected and routed to a stormwater facility located in the upland area directly north of Wetland "A". The discharge from the facility was at the low point of the site in this location, approximately 70 feet into Wetland "A". To address energy dissipation, a riprap pad was proposed. This also served as the discharge point for the roof runoff from the south lots. To remove the impact of the riprap on the wetland, the stormwater system was redesigned to be located above the wetland which enabled the riprap energy dissipation pad to be moved outside of the wetland. Due to the topography of the site, the roof runoff from the lots to the south still need to be routed to the low point of Wetland "A". However, due to the small amount of runoff, in lieu of a rip rap pad to protect the discharge point a geotextile designed to reinforce a vegetated surface is to be used. This best management practice (BMP) is not considered a wetland impact. See attached Preliminary Drainage Plan dated 9/6/21 (Original Design) and Preliminary Drainage Plan dated 2/15/22 with 8/12/22 revision (Current Design).

### **Summary**

In summary, it is not feasible to avoid all wetland impacts while developing the proposed project and still meet the requirements of the implementing regulations of the Camas Comprehensive Plan. A range of project alternatives have been implemented by the Applicant to minimize impacts as demonstrated above. The current layout balances the goal of minimizing onsite wetland and buffer impacts while also complying with the Camas Comprehensive Plan requirements.